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10/673,111	09/26/2003	Kentaro Toyama	MCS-043-03 (304965.01)	2316

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EXAMINER	
COLAN, GIOVANNA B	
ART UNIT	**PAPER NUMBER**
2162	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,111	TOYAMA ET AL.	
	Examiner	Art Unit	
	Giovanna Colan	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 26-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22, 26-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is issued in response to the Amendment filed on 07/28/2006.

2. Claims 1 – 2, 18, and 26 were amended. Claims 23 – 25 were canceled. No claims were added.

3. This action is made Final.

4. Claims 1 – 22, and 26 – 30 are pending in this application.

5. Applicant's arguments with respect to claim1 – 2, 18, and 26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1 – 6, 14 – 18, 21 – 22, 26 – 27, and 29 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBride (US Patent No. 6,370,476 B1, issued: April 9, 2002) in view of Agrawal et al. (Agrawal hereinafter) (US Patent No. 5,647,058, issued: July 8, 1997).

Regarding Claim 1, McBride discloses a computer-implemented process for combining a precision estimate of a database entry's coordinate value with the coordinate value into a single index, comprising the process actions of:

inputting one or more location entities (Col. 3 and 9, lines 23 – 26 and 43 – 46; respectively, McBride); and

computing a one dimensional grid index series (Col. 8, lines 38 – 41, two-dimensional, McBride; and Col. 5, lines 38 – 41, "N-dimensional, Agrawal) wherein each location entity is represented as a series of grids that incorporate the location of each location entity (Col. 4, lines 32 – 33 and 40 – 44, the grid point index, McBride); and

Furthermore, McBride discloses storing information in memory (Col. 9, lines 29 – 32, McBride). However, McBride is silent with respect to a database. On the other hand, Agrawal discloses a database management system including: outputting said index series to a database (Col. 5, lines 38 – 41 and 49 – 50, Agrawal). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Agrawal's teachings to the system of McBride. Skilled artisan would

have been motivated to do so, as suggested by Agrawal (Col. 4, lines 1 – 4, Agrawal), to provide a method for high dimensional indexing which guarantees completeness, and which reduces the propensity for false positives, thus being efficient. In addition, both of the references (McBride and Agrawal) teach features that are directed to analogous art and they are directed to the same field of endeavor of database management system, such as, indexing, searching, and querying indexed databases. This relation between both of the references highly suggests an expectation of success.

Regarding Claim 2, the combination of McBride in view of Agrawal discloses a computer – implemented process wherein the grid index series is constructed from a number of grid indices overlaid on the same space with the grid units of different sizes (Col. 4, lines 38 – 44, "... Allowing the quantities q*m*, c*x,m*, c*y,m* and c*x,m* to vary with the grid point index m allows **different weights or sensitivities to be assigned to different grid points**, depending upon the location of such point", McBride) and wherein the size of each grid is related to the precision of the coordinate values of a database entry (Col. 4, lines 45 – 53, "assigned to different grid points, **depending upon the location** of such point ... The **criterion used for "closeness" between a grid point pm,G and a survey control point psc-n** may be the conventional ... For each nearest control survey point ...", McBride; and Col. 5, lines 38 – 41 and 49 – 50, Agrawal)

Regarding Claim 3, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein a location entity is a point (Col. 9, lines 29 – 32, McBride).

Regarding Claim 4, the combination of McBride in view of Agrawal discloses a computer-implemented process of claim 1 wherein a location entity is an area (Col. 3, lines 38 – 41, McBride[1]).

Regarding Claim 5, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein said area is defined by a center latitude and longitude (Col. 2, lines 41 – 44, latitude and longitude, McBride) and a width (Col. 5, lines 34 – 37, McBride[2]) and a height (Col. 2, lines 41 – 44, height, McBride), each measured from the center latitude and longitude and along lines of latitude and longitude (Col. 4, lines 22 – 24, McBride).

Regarding Claim 6, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein equirectangular projection is used to input latitude and longitude values of said one or more location entities as x-y pairs on a Euclidean coordinate system (Col. 4 and 5, lines 1 – 4 and 34 – 37; respectively, McBride).

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[1] Wherein examiner interprets the region as the area claimed.

Regarding Claim 14, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein the location entity is geographic location data (Col. 3, lines 34 – 41, survey location, McBride).

Regarding Claim 15, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein the location entity is described in terms of latitude and longitude (Col. 2, lines 41 – 44, McBride).

Regarding Claim 16, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein the latitude and longitude values are taken as straight x-y pairs on a Euclidean coordinate system (Col. 4, lines 7 – 10, McBride).

Regarding Claim 17, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein the location entity is described in terms of latitude, longitude and altitude (Col. 2, lines 41 – 44, latitude, longitude, and height, McBride).

Regarding Claim 18, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein the latitude, longitude and altitude values are taken as (x,y,z) pairs on a Euclidean coordinate system (Col. 4, lines 6 – 10, location coordinates ($X_{m,G}$, $Y_{m,G}$, $Z_{m,G}$), McBride).

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[2] Wherein examiner interprets that rectangular coordinates imply the use of width claimed.

Regarding Claim 21, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein the database comprises a location entity identifier (Col. 3, lines 62 – 64, survey control points, McBride; and Col. 5, lines 43 – 46, "entries", "coefficients", "component", Agrawal) and a scale index for one or more scales each corresponding to a different grid (Col. 4, lines 42 – 44, McBride; and Col. 5, lines 59 – 61, an index, Agrawal).

Regarding Claim 22, the combination of McBride in view of Agrawal discloses a computer-implemented process wherein a query of the database comprises the following process actions:

querying which location entities are in a given grid cell at a given grid scale (Col.5, lines 17 – 19, given any particular query, Agrawal);

searching in the data of the given grid scale for the values of the given grid cell (Col. 5, lines 61 – 65, Agrawal); and

returning said values of the given grid cell at the given grid scale (Col.5, lines 64 – 67, to retrieve the qualifying object, Agrawal).

Regarding Claim 26, the combination of McBride in view of Agrawal discloses a computer-readable medium having computer-executable instructions for combining a precision estimate of a database entry's coordinate value with the coordinate value into a single index, said computer executable instructions comprising:

inputting one or more location entities (Col. 3 and 9, lines 23 – 26 and 43 – 46; respectively, McBride); and

computing a one-dimensional grid index series wherein each location entity is represented as a series of grids that incorporate the location of each location entity (Col. 4, lines 32 – 33 and 40 – 44, the grid point index, McBride); and

using the grid index to perform a query of the location entities (Col. 5, lines 17 – 26, "given any particular query … similarity search …", Agrawal) such that any query that seeks a match of a location entity at a small grid size does not seek a match of a location entity at a larger grid size than said small grid size (Col. 5 and 9, lines 61 – 67 and 61 – 65, "searching for objects similar to a given object .. to retrieve the qualifying objects…"; respectively, Agrawal[3]).

Regarding Claim 27, the combination of McBride in view of Agrawal discloses a computer-readable medium wherein the instruction computing a grid index series uses an equirectangular projection (Col. 5, lines 34 – 37, McBride).

Regarding Claim 29, the combination of McBride in view of Agrawal discloses a computer-readable medium wherein the series of grids is a hierarchical series of equilateral polygons embedded within a Platonic solid (Fig. 3 and 4, Col. 6, lines 25 – 30, McBride).

Regarding Claim 30, the combination of McBride in view of Agrawal discloses a computer-readable medium wherein the series of grids is a hierarchical series of polygons that grids the globe (Col. 6, lines 25 – 30, McBride).

9. Claims 7 – 8, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBride (US Patent No. 6,370,476 B1, issued: April 9, 2002) in view of Agrawal et al. (Agrawal hereinafter) (US Patent No. 5,647,058, issued: July 8, 1997), and further in view of Enomoto (US Patent No. 6,603,885 B1, filed: April 29, 1999).

Regarding Claims 7, the combination of McBride in view of Agrawal discloses all the limitations as disclosed above including a computer-implemented process wherein the process action of computing a grid index series comprises: gridding the globe (Col. 2 and 3, lines 27 – 32 and 37 – 38;respectively, McBride), and indexing each grid (Col. 4, lines 32 – 33 and 40 – 44, the grid point index, McBride). However, McBride is silent with respect to resolutions, and raster scan order. On the other hand, Enomoto discloses gridding at a prescribed number of resolutions (Col. 70, lines 61 – 67, Enomoto); and grids in raster scan order (Fig. 25A and 25B, Col. 64, lines 20 – 27, Enomoto). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Enomoto's teachings to the system of the combination of McBride in view of Agrawal. Skilled artisan would have been motivated to do so, as suggested by Enomoto (Col. 6, lines 35 – 39 and 53 – 57, Enomoto), to

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[3] Wherein the step of using the similarity search, including the distance "less than or equal" (Col. 9, lines

provide high-speed image processing on image data with higher degree of flexibility, and to provide more intense sharpening to image quality. In addition, the applied references (McBride, Agrawal, and Enomoto) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, image processing. This relation between the applied references highly suggests an expectation of success.

The combination of McBride in view of Agrawal and further in view or Enomoto discloses all the limitations as disclosed above including: mapping the latitude and longitude coordinates of each location entity to the index (Col. 2, lines 41 – 49, McBride[4]).

Regarding Claims 8, the combination of McBride in view of Agrawal and further in view or Enomoto discloses a computer-implemented process wherein the prescribed number of resolutions is 20 (Col. 70, lines 61 – 67, Enomoto).

Regarding Claims 28, the combination of McBride in view of Agrawal and further in view or Enomoto discloses a computer-readable medium wherein the series of grids grid the globe at twenty different resolutions (Col. 70, lines 61 – 67, Enomoto), with "square" units whose sides correspond to $20x(1/2)^r$ degrees, for $0<= r<20$ (Col. 4, lines

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55 – 65, Agrawal) corresponds to the step of not seeking a match of a location ... at a larger grid size as claimed.

[4] Wherein examiner interprets the step of associating and matching the coordinates to each grid as the step of mapping claimed.

40 – 44, different weights or sensitivities to be assigned to different grid points, McBride).

10. Claims 9 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBride (US Patent No. 6,370,476 B1, issued: April 9, 2002), in view of Agrawal et al. (Agrawal hereinafter) (US Patent No. 5,647,058, issued: July 8, 1997), in view of Enomoto (US Patent No. 6,603,885 B1, filed: April 29, 1999), and further in view of Porcelli et al. (Porcelli hereinafter) (US Patent No. 6,333,924 B1, issued: December 25, 2001).

Regarding Claims 9, the combination of McBride in view of Agrawal and further in view or Enomoto discloses all the limitations as disclose above including determining the longitude, and standard deviation, where a standard deviation σ is the measurement error of a given latitude (Col. 7, lines 52 – 55, McBride), longitude coordinates (Col. 2, lines 41 – 44, latitude and longitude, McBride). However, the combination of McBride in view of Agrawal and further in view or Enomoto is silent with respect to determining the longitudinal span, D. On the other hand, Porcelli discloses determining the longitudinal span, D, in degrees (Col. 8, lines 27 – 32, Porcelli). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Porcelli's teachings to the system of the combination of McBride in view of Agrawal and further in view or Enomoto. Skilled artisan would have been motivated to do so, as suggested by Porcelli (Col. 8, lines 17 – 18 and 27 – 32, Porcelli), to calculate the true Earth centered

angle at a given latitude, and further utilized this calculation to provide continuity of services in two geographical areas at opposite longitude. In addition, the applied references (McBride, Agrawal, Enomoto, and Porcelli) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, global positioning systems, and latitude and longitude measurements. This close relation between the applied references highly suggests an expectation of success.

The combination McBride in view of Agrawal in view of Enomoto and further in view of Porcelli discloses all the limitations as disclosed above including: determining the degree-scale of precision, R, to be the discrete unit of resolution just larger than D (Col. 70, lines 61 – 67, Enomoto).

Regarding Claim 10, the combination McBride in view of Agrawal in view of Enomoto and further in view of Porcelli discloses a computer-implemented process wherein the longitudinal span in degrees that 3σ meters corresponds to is $d=[180(3\sigma)\cos(\text{latitude})]/k\pi$ is determined, where k is the circumference of the earth in meters (Col. 8, lines 27 – 32, Porcelli).

Regarding Claim 11, the combination McBride in view of Agrawal in view of Enomoto and further in view of Porcelli discloses a computer-implemented process wherein the process action of determining the degree-scale of precision, R, to be the discrete unit of resolution just larger than D comprises setting $r = |\log_2 d/20|$ (Col. 70, lines 61 – 67, Enomoto).

Regarding Claim 12, the combination McBride in view of Agrawal in view of Enomoto and further in view of Porcelli discloses a computer-implemented process wherein the globe is gridded with overlapping grids at each scale in order to increase accuracy (Col. 3 and 4, lines 64 – 67 and 1 – 2; respectively, McBride[5]).

Regarding Claim 13, the combination McBride in view of Agrawal in view of Enomoto and further in view of Porcelli discloses a computer-implemented process wherein coordinates of location entities are mapped to the square whose center is closest (Col. 3, lines 62 – 64, McBride).

10. Claim 19 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBride (US Patent No. 6,370,476 B1, issued: April 9, 2002), in view of Agrawal et al. (Agrawal hereinafter) (US Patent No. 5,647,058, issued: July 8, 1997), in view of Enomoto (US Patent No. 6,603,885 B1, filed: April 29, 1999), and further in view of Na et al. (Na hereinafter) (European Patent Application EP 838 764 A2, filed: October 23, 1997).

Regarding Claims 19, the combination of McBride in view of Agrawal and further in view of Enomoto discloses a computer-implemented process wherein the location entity's coordinates in latitude (lat) and longitude (long) is mapped to the index (Col. 2,

lines 41 – 49, McBride[6]), and the degree-scale of precision (Col. 70, lines 61 – 67, Enomoto[7]). However, the combination of McBride in view of Agrawal and further in view of Enomoto does not expressly disclose a specific formula for mapping this information to the index. On the other hand, Na discloses: location entity's coordinates in latitude (lat) and longitude (long) mapped to the index by $I = (360 / r) [(lat + 90) / r] +[(long + 180) / r]$ where *r* is the degree-scale of precision, and I maps the coordinates to the location entity (Page 7, lines 6 – 8, 23 – 25, and 43 – 46, Na). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Na's teachings to the system of the combination of McBride in view of Agrawal and further in view of Enomoto. Skilled artisan would have been motivated to do so, as suggested by Na (Page 11, lines 43 – 48, Na), to manage map data involving maps of various scales via a formalized index structure and a hierarchical structure, thus the size of the index file can be minimized and the search of the map data can be simply performed via simple calculation and a map database efficiently constructed. In addition, the applied references (McBride, Agrawal, Enomoto, and Na) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, database management systems, global positioning systems, latitude, longitude measurements, and indexing locations. This close relation between the applied references highly suggests an expectation of success. In addition, examiner takes in consideration that this step would have been obvious because it is the only way to

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[5] Examiner interprets: containing different points drawn in Fig. 3, McBride, implies overlapping the gridding.
[6] Wherein examiner interprets the step of associating and matching the coordinates to each grid as the step of mapping claimed.

geometrically calculate the index in degrees when utilizing inputs, such as, latitude, longitude, and radius of the earth.

Regarding Claims 20, the combination of McBride, in view of Agrawal, in view Enomoto, and further in view of Na discloses a computer-implemented process wherein to recover the latitude and longitude values, the latitude (lat) and longitude (long) is calculated as:

$lat = lr^2 / 360 - 90 + r / 2$ (Col. 2, lines 41 – 49, McBride[8]; and Page 7, lines 11 – 15, Na),

$long = l \% r / 360 - 180 + r / 2$ ((Col. 2, lines 41 – 49, McBride[9]; and Page 7, lines 17 – 21, Na),

where *r* is the degree-scale of precision, *l* maps the coordinates to the location entity, and % is the modulus operator.

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[7] Wherein examiner interprets the resolutions as the degree-scale of precision claimed.
[8] Wherein examiner interprets the step of associating and matching the coordinates to each grid as the step of mapping claimed. This formula represents a procedure to geometrically calculate the latitude and longitude utilizing the index discussed above.

Response to Arguments

1. Applicant cannot show non-obviousness by attacking references individually where, as here, the rejections are based on a combination of references.

In re Keller, 208 USPQ 871 (CCPA 1981).

2. Applicant argues that the prior art fails to disclose the newly added/amended limitation; "computing a one dimensional grid index series wherein each location entity is represented as a series of grids that incorporate the location of each location entity; and outputting said index series to a database".

Examiner respectfully disagrees. The combination of McBride in view of Agrawal does disclose the newly added limitation of computing a one dimensional grid index series (Col. 8, lines 38 – 41, two-dimensional, McBride; and Col. 5, lines 38 – 41, "N-dimensional, Agrawal) wherein each location entity is represented as a series of grids that incorporate the location of each location entity; and outputting said index series to a database. (See 103 rejection of claim 1 discussed in this office action above).

3. Applicant argues that the prior art McBride, Agrawal, Enomoto, Porcelli, or Na fail to disclose the newly added/amended limitation; "computing a one dimensional grid index series wherein each location entity is represented as a series of grids that

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[9] Wherein examiner interprets the step of associating and matching the coordinates to each grid as the step of mapping claimed. This formula represents a procedure to geometrically calculate the latitude and longitude utilizing the index discussed above.

incorporate the location of each location entity; and outputting said index series to a database".

Examiner respectfully disagrees. As stated in this office above, the combination of McBride in view of Agrawal was cited to reject such limitation (See 103 rejection of claim 1 discussed in this office action above).

4. Applicant argues that the office action fails to establish prima facie case of obviousness over McBride and Agrawal.

Examiner respectfully disagrees. According to MPEP § 2142, to establish *prima facie* case of obviousness three basic criteria must be met. **First**, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. The prior art discloses a suggestion for combining the references (Col. 4, lines 1 – 4, Agrawal).

As suggested by Agrawal, skilled artisan would have been motivated to make such combination, to provide a method for high dimensional indexing which guarantees completeness, and which reduces the propensity for false positives, thus being efficient. **Second**, there must be a reasonable expectation of success. The prior art suggests a successful outcome of this combination, such as, guarantying completeness. **Third**, both of the references (McBride and Agrawal) teach features that are directed to the same industry field of database management systems, such as, relational databases, indexing, searching, and querying indexed databases. This close relation between both

of the references highly suggests an expectation of success. Therefore, the combination of McBride in view of Agrawal discloses all the claim limitations disclosed in the claimed invention (see- citations of claims 1 – 22, and 26 – 30 above).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Prior Art Made Of Record

1. McBride (US Patent No. 6,370,476 B1, issued: April 9, 2002) discloses an interpolation of survey coordinate differences.

2. Agrawal et al. (US Patent No. 5,647,058, issued: July 8, 1997) discloses a method for high-dimensionality indexing in a multi-media database.

3. Enomoto (US Patent No. 6,603,885 B1, filed: April 29, 1999) discloses an image processing method and apparatus.

4. Porcelli et al. (US Patent No. 6,333,924 B1, issued: December 25, 2001) discloses high latitude geostationary satellite system.

5. DeLorme et al. (US Patent App. Pub. No. 2003/0182052 A1) discloses an integrated routing/mapping information system.

6. Na et al. (European Patent Application EP 838 764 A2, filed: October 23, 1997) discloses mapa data base management method and system therefor.

Points Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna Colan whose telephone number is (571) 272-2752. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Giovanna Colan
Examiner
Art Unit 2162
September 25, 2006

JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

SA